

Group 1

Recommendations passed by Group 1.

1. This Group feels that the existing policies and management practices of grassland conservation are inadequate all over the country. While the reserved velds are in good condition, the non-reserved velds are in very bad condition.

The Group strongly recommends that

- a) All non-reserved velds of the Forest Department should be declared as Reserved Velds.
- b) If it is not possible that all non-reserved velds become reserved velds, then the non-reserved velds leased to maddhoris cooperative societies should be made to strictly adhere to the rules of cutting the grass. Grazing should not be allowed.

—?

Nearly 550 sq. km in Kutch & Saurashtra is to be transferred to the Forest Dept. for Compensatory Afforestation. About Rs 250 crores has been allotted for this purpose.

2. (a) Areas allotted to the Forest Department for compensatory afforestation should be taken primarily for development of grasslands in Saurashtra and Kutch.
- (b) No Prosopis plantation should be done in these areas.
- c) There should be a joint management programme, involving local N.G.O.s, in non-reserved vides of less than 100 hectares.
- d) Non-reserved vides of more than 100 ha should be given status of reserved ~~the~~ vides and they should be managed by the Forest Department

Group-3 - Recommendations

①

I - Public participation is a must in all management practices of grasslands. and

- Cooperative Society to be formed in each village which will manage the grasslands in and around the village.
- No crop cultivation or plantation to be allowed on gouchar lands.
- Wastelands existing around the village to the village grass cooperative and the same to be developed as grass land. The Cooperative Society should also include the maddharis as members.
- Non-resident villagers who have settled in urban centres and are willing to donate funds for ~~imp~~ their villages should be encouraged to adopt plots of land and develop them as grasslands, the grass from which should could be harvested and used for the village cattle.
- Integrated rural development plan, employment

generating cottage industries to be established in the villages. The idea is to provide substantial income to each family in the village from agriculture, milk Society and cottage industry.

3) - Mass communication methods - audio-visuals, films, video shows, Village meetings to be organised.

- Village teachers and students to be motivated and their potential also to be channelised to spread the awareness.

- Local NGO's to be motivated ~~for all~~ to undertake all necessary extension work in this regard.

- Needs of the villagers to be kept in mind while planning the awareness campaign.

- Involvement of School students from urban areas also to be considered.

4 and 5

List of grasslands:

- Kutch - Lala bustard Sanctuary, Abdasa taluka, Banni grasslands, Bhuj taluka, Chadva and Rakhal veedi in Mandvi taluka, grasslands in Lakhpat taluka.
- Amreli district - Dedhan grasslands, Khamba veedi in Dhari taluka.
- Bhavnagar district - Halthab veedi, Hoidad veedi, Rhodiyar veedi, Fraqat veedi, Savar Kundla veedi, Mahua veedi, Dhankania veedi, Pransa veedi, Limba Hanuman veedi and Palitana veedi (courtesy shri shivbhadrasingji)
- Jamnagar - Gaga bustard Sanctuary, Bhat Vadia, Raker beyt, Gowane veedi - all in Kalyanpur taluka.
Kendri area (near Banadia), Mojap grasslands, Poshitra veedi (all in okhamandal taluka)
Piperitoda - in Jamnagar taluka.

Surendranagar — Jagad Veedi, Mangadh veedi, Tikan Veedi, Latuda-Katuda (in Dhrangdhra taluka), Mandav veedi in Chotila taluka

Junagadh — Babra veedi, Amrapur veedi, Lin Maliya Hatina taluka, Veerdi veedi, Develiya veedi.

6) a) Florican watch to be structured on the lines mentioned in the background paper.

It should be affiliated to an established organisation like WWF, BNHS or SACON.

- Due recognition to be given to individuals/organisation for the work done by them.

- Co-ordinating and funding agency should be SACON

b) Ms. Neeta Shah - Southern part of little Rann of Kutch.

Mr. Mihir Dave — Baroda District

Mr. Pranav Trivedi — Ahmedabad District

Mr. Ajaysinh Jadia — " "

Mr. Rajendrasinh Jadia — " "

Satish H. Trivedi } Western Jamnagar district
Shrihari Gupta }

Shivbhadra Singhji } Bhavnagar district
I. R. Gadhoi }

Sag Satyasinhji Khachar - Jasdan Taluka

Pradeepbhai Pandya, } Rajkot district
Parimalbhai Joshi }

V. M. Khan } Mallangadh Taluka, Mansar district
S. M. Khan } M.P.

Bharat Jethwa - Junagadh district

Mr. R. S. Pathan - Gandhinagar district.

Mr. Shantilal N. Veru - Kutch district

Mr. Navnet Bapat - "

7) Large plots of fallow lands/waste lands/ agricultural lands are being acquired by private agencies for setting up wind turbines for power generation along the western coastal area of Jamnagar and Porbandar district (Kurenga/okhamadhi area in Okhamandal taluka) and around Lamba/Bhogat area in Porbandar taluka of Junagadh district.

These agencies have surplus fallow lands which are well protected. These agencies should be motivated/pressurised to develop their lands as grasslands. If needed help of Govt. authorities/agencies to be sought in this regard.

Mr Daniel

NGOs should be involved in the management of some sanctuaries such as Rampara sanctuary, with the FD looking after the land.

Shubhadra Nathji

Land should be given to private people for management.

ACF Velavadar National Park.

From Surenthranagar: D.S. Shastri
Mallick of Zainabed, Bhawanisingh
Mori, Shri Bhambhani Patgir, Anandpur
Jyoti Khachar, Chotila, ACF Wildlife
Sanctuary, Dhruvgedhon.

KUTCH: M.K. Himmat Singh, Shri Shantilal
N. Vani, Narin Bapat,
Trilochan Chhaya, Shri H.L.
LALKA (Retd.) DFO.

Assistant-Conservator of
Forests - Narayan Sarovar
Sanctuary, (the state govt
proposed to demotify the
Sanctuary.)

My humble

I have ~~an~~ ~~more~~ suggestion to the
Forest Department of Gujarat that
they should not plant or project
propagate the plantation of the
Prosopis Juliflora and should
buy and eradicate the same
from the grasslands (Reserved/
unreserved grasslands)

District-wise List of Individuals

who ~~would~~ are interested in the
Birds Conservation Programme

Rife/Annual subscribers.

RAJEST :- WWF-India, Dr Dignijyasingh,
Shri Hitesh Dave, Gondal, D.S. Sahyaji
Khacher of Jodhpur, Shri Malay Shah.

Green officer of the Forest Dept.
who is in charge of the Reserved and
Non-Reserved Vildis, Shri Nagjibhai
Panchsara, Moti Pandi, Shri V.L. Nimavat
Jodhpur.

JAMNAGAR. H.H. Jam Sahab, Shri Satish
H. Trivedi and Member of the
Amateur Rangers Nature club.

Jamnagar: Wildlife Wing of the
Forest Department, Shri Ramesh
Pandya, Shri Govindbhai Vekaria
Keshod, Shri Kishorebhai Joshi
Porbandar.

Amreli :- Dr M.K. Bhandal, Member of
the Forest Youth club

Bhavnagar :- M.K. Shivthadrasingh
and Members of the
Wildlife Conservation Society

as a wild life sanctuary, but till today practically nothing has been done. Chukhara, wolf and Nilgai are present, and in a good rainfall year, a male florican was seen in every 50-60 acres.

The Group strongly recommends that -

- : a sound and practical management plan should be quickly prepared and implemented
- : adequate financial aid should be provided to develop the area as a grassland sanctuary
- : no plantation should be done.

b) Lala Bustard Sanctuary: Abdasa taluka, Dist Kutch.

- (i) we should identify and notify a wild life sanctuary for the Great Indian Bustard, Lesser Flincen, ~~and~~ Houbara ~~and~~ Chukhara, wolf etc. around

Lala. There should be a core area of about 1000 hec with scope for expansion hereafter.

(ii) Prosopis should be eradicated from the grassland and no further plantation should be done.

3) Narayan Sarovar Chubara Sanctuary
This group feels that

(i) any de-notification will be detrimental to all species of wildlife, especially the florican, bustard, wolf and chubara.

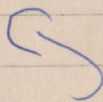
(ii) Settlement proceedings of the sanctuary should be completed quickly, under the wildlife (Protection) Act.

Jagdish prasad.

Existing policy of R.V. adequate.

M.A.V. to be allotted to priority tribals.

- 1 Pajimpols
- 2 Ghonhika.
- 3 Panhyat
- 4 Mauli



① Re leader of the Institution who with few others harvest grass depriving local people. Carry resentment. Results in fire etc.

② Situation has arisen when contractor system has become better because contractor shares harvest with cattle.

③ Mr. Mayank Sharma.

① ~~For~~ conservation of grasslands is against the trends and may not be

possible.

② Samli became a pony font due to overprotection. *

③ S. Chavan.

M. Sharma.

1) local customs of leaving cattle free in Panchhals between Holi & Hirt Pn. How do you control.

2) G.V. Reddy.

Why not a gray policy? Since the existing policy is (cattle trespass act) in 1871.

All

1) as ~~with~~ animal husbandry is not milk oriented - stall feeding?

S. Chavan

1. Stop planting trees in R.V.

G.V. Reddy

1. Preferably Savannahs.

J.A Khan

1. Don't use Conservation

Title:- Development of grassland for floricans & man.

2. What will happen if the sp. becomes extinct.

3. Everything is looked at ^{from} financial return perspective.

4. Societal gain vs Financial gain.

↓
In depth study to,

S. Chavan.

1) Joint Forest Management.

J. Prasad.

2) No institution specially for J.F.M
but give FD to involve people
more.

3) Some share in terms of grass
by local villages around R.vidis.

Resolution 1

1. That ^{the fodder uses} villages around R.V. should be
first^{ly} fulfilled.

O.P. Khan.

Grass not only for
villages ~~at~~ ~~the~~ ~~area~~.

— 10 Committee.

Identify M.P.U.

1 Pali & Jalone & Sirohi

1. Grass can be cut from there by paying royalty.

1. Native education for children who live around process of self learning should be inculcated.

To Resolution I

~~Be proper management~~

② If the situation warrants, the villagers around should be given a share of harvest from reserved velds.

① Local villagers are not adequately benefitted ~~by~~ from reserved velds as the fodder normally exported.

II. ~~Government~~ Local illicit demands for green & dry fodder ^{has been} created by Maldkhanis. with the result that illicitly ~~harvest~~ goes on.

There should be some provision that ^{residents Maldkhan} they can directly purchase hay from godown.

In kutch.

1. Animal Husbandry

1. Resolution

1. Areas which are owned by the Revenue Dept., ~~the~~ ~~parts~~ should be identified and protected as grasslands.

10% of forest	1237700 ha.
24% with Revenue	3588700 ha.
4.5% with panchayat	845700 ha.

~~expect~~

Develop grasslands under soil/moisture Conservation works.

Tataqolla / Kharonda / Panva

1. Be taken up for habitat restoration of the lesser florican.

* Examine if grass groves co-ocurrence can be established similar to Tree-grasses association.

Pran land necessary for C.F conservation must be identified first

2. Lala burtal Sanctuary.

1. F & D. is gone to get 500 sq. km
in Sawantra thutch.

No prosopis should be planted.
Should be developed as grassland.

~~It is not to be planted~~

wherever

2. Non-reserved lands should be
declared non-forest land these lands
should be brought under the
purview Indian Forest Act and
should be developed as a
grassland

A specific study to amalgamate.

1. Total loss for the maintenance
of livestock by converting it
to other purposes.

2. A cost account made on the
value of grasslands.
Economics of conserving grassland.

1. Proper and timely disposal of grass collected from R.vidis. No gram /todder/hay should be allowed to be wanted.

Became it has a heavy on grassland management as it discourages proper management.

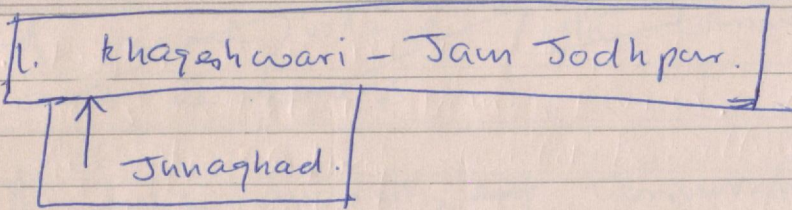
2. Grass should be not stored for more than 1-2 yrs.

Rajasthan.

1. A survey for grasslands
- 2.

M.P.

1. Silviculture
2. ~~Cost survey~~. A survey for



⑤ Due to Atrocity Act protection becomes difficult.
should be excluded from Protected Areas.

~~A model village with commitment and awareness~~

① * A fully aware, and conservation conscious and action oriented "model village" should be created, and adequate training should be imparted for replicating such models.

* ~~Employment of proper animal husbandry ~~should~~ to improve the ~~productivity~~ quality of the livestock.~~

* ~~The Maldanis should be ~~supplied~~ with the harvested grass, ~~but~~ so as to prevent ~~the~~ cattle foraging cattle, from causing damage to land.~~

* ~~Educational prog. to create gen awareness amongst concerned villagers should be ~~carried~~ undertaken. ~~Use of~~ video clips, ~~distribution of~~ N.E. ~~prog~~ should be conducted by FD, and NGOs like ~~that~~.~~

Nandin 02a.

lok satha kanyalay
Nagerwada.

555 010
424160

Group. 2.

I.

Overall policies & management of R.V.'s are adequate

1. However local villages are not adequately benefitted from R.V. as the fodder harvests are stored locally, but exported during times of scarcity.

Resolution.

If the local situation warrants it, the villagers around should be given a share of the harvest.

2. That this is necessary is seen in some instances of M.R.V. M.R.V.'s are allotted to
 1. Panchayats
 2. Ghumkallas
 3. Panchayats
 4. Mandlis and
 5. Contractors.

Normally the leaders of the above institution often corner the produce

thereby degrading locals.

Then the contractor system has become better because the contractor stays the hunt with the catter.

There is no grazing policy. Since the existing policy 'the cattle trespasses act' was formulated in 1871 there is urgency for a grazing policy to be formulated.

1. Stop planting trees in R.V. Even in other areas rather than dense tree plantations a form of savannah with clumps of planting should be done.

Greater involvement of people in production and protection of fodder produced from grasslands.

2. Whenever N.R.V. are non forest lands, these should be brought under the purview of Indian Forest Act and should be developed as grasslands.

II. Should be specific and locations should be taken up on a case by case basis. A broad spectrum policy cannot be formulated because each location will vary in approach from one another.

- Gujarat. \rightarrow $\boxed{\$7000ha}$ \rightarrow
- 1) Khageshwar - Jam Jodhpur | ^{Kutch} ~~Sanctuary~~
 - 2) Tatagolla & Khayonda area in panchmahals.

Is an existing plantation area but has a TCMY etc.

Must be taken up for restoration of habitat.

- 3) Lala buntal Sanctuary.
3-5 more plots of 200 ha each needs to be developed.
* No grazing for 4 months.
- 4) Creation of another Velavadar as has been proposed by Wildlife Dept.

A thorough survey of Rajathan
an M.P.

III A study incorporating all
angles at the district or taluka
level. i.e. lives stock population,
fodder demand, fodder availability,
location and potential fodder output
of the region.

The economics of converting grassland.

IV FID to get 500 sq. kms in
samantkora and kutch

No prosopis is to be planted
Area should be developed as
fodder producing grassland.

Proper & timely disposal of grass collected
from R. vides. No grass/fodder to
be wasted. Purchase of fodder from

1) Euphorbia plantys.

2) Shefrunji Baye

3) protect Hilly tracts.

4) District-

+ Contractors must not be allowed
as it discourages proper management
and results in resentment amongst locals

x Must examine if ~~the~~ grass growers
co-operatives can be established
similar to tree growers association

The onus of grassland conservation
cannot lie entirely on the FD.
Particularly their current role as
providers of Fodder.

Because.

FD owns 10% Revenue own 24%
and grass parichiyats own 4.5%

They must bear some if not
proportionate responsibility of
restoring grassland habitat and meeting
Fodder demands.

This workshop has been erroneously
titled.

Development of grasslands for ^{people} men & horses.

List of Grass - Pans (Western Rajasthan)

Pali (F) 1. Guda Endla

2. Binjowa

(F) 3. Bali Jod

4. Ramania x Las

5. Tikhi - Mandpur

6. Kalu Jod.

Jalore 1. Bhawatada

2. Hatimtai
3. Harji - mailnars

Sirohi 1. Balda (Sirohi Jod)

2. Mahadar

J.S. Nathawat
(J.S. Nathawat)
Dy. Chief wild life
warden, Udaipur

Let's Get to the Point

पिपि

WORKSHOP ON CONSERVATION OF LESSER FLORICAN
DECEMBER 2-3, 1994 BARODA

RECOMMENDATIONS FROM WORKING GROUP NO.2

- I Are the existing policies on grass lands and their conservation adequate?

The overall policies and management of reserved vidis are adequate however, local villages are not adequately benefitted from reserved vidis, as the fodder harvests are stored locally, but exported during the times of scarcity.

RESOLUTION

If the local situation warrants the villagers around should be given a share of the harvest.

That this ^{ary} necessity is seen in some instances in non-reserved vidis. Non-reserved vidis are allotted to;

Panchayats

Panjrapols

and Ghousahals in Gujarat

- II Taagolla & Kharonda Area

Is an existing plantation area and has a TCM and rubble wall must be taken up for restoration of habitat of Lesser Florican

Action: Forest department and SACON to prepare a work plan for this location

Lalla Bustard Sanctuary: 3 to 5 more plots of 200 hectares each needs to be developed as this area is not a harvest oriented area, management should be of having a ban on grazing from July to October 15th

Creation of another Velavadar as has been proposed.

A thorough survey of Rajasthan and MP for areas for restoration

- III Currently, our approach has been only from the angle of lesser Florican This workshop has been erroneously titled, it should be Development of grasslands for man & Floricans

WORKSHOP ON CONSERVATION OF LESSER FLORICAN

BARODA DECEMBER 2-3, 1994

- I Assign responsibility of grassland conservation to local people and give them ~~re~~^{mun}eration
- A fully aware~~d~~, conservation conscious and action oriented model village should be created, and adequate training should be ~~im~~parted for replicating such models.
- Implementation of ~~pr~~proper animal husbandary methods to improve the quality of livestock.
- II The Maldharis should be supplied with the harvested grass, so as to ~~pr~~^event the foraging cattle, from causing ~~da~~^amage to grassland.
- III Educational programmes to create general awareness amongst concerned villages should be undertaken. Nature ~~edu~~education activities should be conducted by Forest Department and N.G.Os
- IV Government should ~~res~~trict themselves from leasing out the existing vidis for grazing and from taking over private vidis under the Land Ceiling Act. Adequate measures should be taken to avoid fragmentation of the grasslands.
- V The florican watch should be structured talukawise where florican sightings have been recorded.
- Village level societies should be formed by interacting with the village heads to put the programme in practice.
- VI Financial assistance for the florican watch can be drawn by approaching: (1) DRDA, (2) State Govern~~me~~^mnts (3) Large Industrial Houses.

Areas of Lesser Florican sites

MADHYAPRADESH

- 1 Jhiria-Ameda Forest tract (Pipri-Panchmarhi Road)
- 2 Ranikheda
- 3 Tamiachindi Road, Dist. ^{dwada.}Chindia.

PRIVATE GRASSLANDS

Vidi near Bhandaria, Jetpur, Dist Rajkot
Padaria Dist. Junagadh
Jilander Bet
Hanumangarh, Junagadh
Malvan Near ~~Dh~~ Dangadhra, fringe of Little rann
Dhakantia vidi near Botad
Hingolgadh, Jaadan Taluka, Dist Rajkot
Khirasra Vidi, Nwar Rajkot
M~~en~~ghani Vidi, Gondal
Anandpur vidi, near Chotila
Gauridadvidi, nr. Rajkot
Pal vidi, near Rajkot (urban area)
Near ~~X~~ Lakhtar Surendranagar Dist.
Sangodhra vidi (between Thangadh & ~~Mandax~~ Surendranagar)
Mandav vidi

LIST OF PERSONS

- (1) Malay Shah Rajkot (2) Parimal Joshi, ^{RAJkot} ~~Dhangatra~~ ^{Dhangadhra} (3) Devji Dhanecha ~~Dhangatra~~ (4) Jamsaheb, Jamnagar (5) SB Bhatt, Jamnagar
(6) Ramesh Pandya, Junagadh (7), DR MK Bharad, Am~~ve~~li
(8) Navinbhai Bapat, Kutch (9) Kishorebhai Joshi, Porbandar
(10) Hitesh Dave, Gondal (11) Nagjibhai Panchasara, Moti Paneli

M.P.

- 12) Mr. Vadivav (Ranger, Panchmarhi), (13) R.R. Choudary (Deputy Ranger, Panchmarhi), (14) Col. Rao, (15) Ms. Shamira Rao
(16) Mr. Shrilal Patel ; all from Panchmarhi.

It is suggested that Prosopis J. may not be planted in grasslands, Sanctuaries/florican areas. Also local people should be involved to eradicate it, through joint forest management.

Ms. Veena Yadav

WORKSHOP ON CONSERVATION OF LESSER FLORICAN
DECEMBER 2-3, 1994 BARODA

RECOMMENDATIONS FROM WORKING GROUP-5

Group 5, comprising of individuals, NGO representatives and govt. department personnels have suggested the following points for the consideration of the forum.

I Creating awareness amongst the nearby population on the importance of lesser florican and its habitat by means of orientation camps, audio-visuals materials etc.

Sajansinh
& Madhu.

Bhavatsingh

Madhu

II Instead of a direct approach to protect and conserve the Lesser Florican, a wholistic approach of protecting the entire habitat is suggested. People's participation and involvement should be given the top priority. Also, to make a positive and responsive participation of the people, an integrated approach with animal husbandary, grass land managements, primary health care etc should be introduced in the protected localities.

Madhu

III Audio-visuals, video cassettes and the electronic media should be used in an interactive manner, so as to enhance the effectiveness. A two-way communication package is suggested.

Oza Sir.

IV If necessary, help should be sought from the army to have access to the grasslands under their control.

Ajay Desai

V So as to minimise the damage caused to grass growth, migratory cattle grazing should be stopped by law. Proper motivation should be given to the villagers to take up harvesting of grass lands.

Rajesh Acharya

VI Since all religions have the scope to motivate people towards protection of lives, this should be exploited for making the conservation efforts more effective.

Bhavatsingh

VII The group has observed that majority of the studies conducted by different agencies were concentrated in Gujarat & MP and very little in Rajasthan. It is suggested that a comprehensive study should be conducted in all the potential areas of Rajasthan.

Shital
Rajesh Acharya

VIII

To generate funds for the action plan, corporate houses, industries, religious and charitable organisations (eg. Jains & Swaminagayan) should be approached.

Vijayraj Tadga

IX

Captive breeding of Lesser Florican should be initiated and plans should be checked out to reintroduce them into their natural habitats

Uday Vora

X

The existing grasslands should not be diverted for any other purposes and strict land policy should be formulated.

Ajay Desai XI Imposition of high grazing fees to discourage unproductive cattle.

LIST OF PRIVATE VIDIS.

1. Lakhtar - own by Thakur saheb in surendranagar.
 2. Viramgam***A*Bad*dist Near Viramgam Industrial Estate, own^{ed} by Red Cross society.
 3. Charal - Gaushala Vidi ; Tal. Sanad.
 4. Dhakanya Vidi - Near Botad, owned by Panjra-pol
 5. Mandal Mahajan Trust Vidi - Kadaktal, Viramgam.
- 666*Rampar,

POTENTIAL L. FLORICAN AREAS.

1. Rampur, Navagam, Godwa Near Dahod in Panchmahals.
2. Maniyare, Guyaliyarna, Midhiyari, Kaniyaro in Kutch.
3. Fringe of Little Rann of Kutch and all bets.
4. Bhilwara, Ajmer, Jaislmer, Dosa, Kundi, Banswara all in Rajasthan.
(Potential areas to be surveyed).

6-A

The group has appreciated the proposed "Lesser Florican Watch" structure. However, a co-ordinator at the local level with 2-3 villagers with adequate knowledge and commitment is suggested.

University / Students should be involved! cream. (Nature Museum)

The group felt that the proposed group for the conservation of the lesser Florican should be a separate entity. However, this body should network with village/local level voluntary groups and other government departments so as to pool in resources and experience sharing.

Individuals working in the field of conservation like Mr Sabbir Malik and Mr Ajay Desai have already offered all possible help including hospitalities to the people interested in conducting studies in the areas of Surendranagar, Amudabad, and Dahod respectively.

(Panchmahals)

6-B

- (1) Lavkumar Khacher (2) Lalsinh Raol (3) Satyajit Khacher
- (4) Bhavanisinh Mori (5) Chatrasalsinh, (6) Balbhadrasinh (Thakurssab of Laktar) (7) Ashwinikumar Gohil (Lathi) (8) Anirudhsinh Jadeja (Sapar)
- (9) Gopalsinh Desai (Patadi)

Mr. Sabbir Malik

Mr. Ajay Desai

Excerpted from

Management & Restoration of Grasslands for People and the Lesser Florican

An Action Plan

Recommendations of the Workshop held at Vadodara, December 2nd & 3rd 1994

Salim Ali Centre for Ornithology & Natural History
Gujarat Ecology Commission
Forest Departments of Gujarat, Madhya Pradesh & Rajasthan

Concomitant to the loss of grassland habitat, particularly that of the protected fodder producing grasslands (*Bheed* or *Vidi*), has been the distressing decline of populations of many species of fauna that were specific to this habitat type. Perhaps the worst affected has been the Lesser Florican *Sypheotides indica* which was once the most common and widely distributed of the resident Indian bustards, is now critically endangered. Its population has reduced from an estimated 4500 birds in the early 1980s to about 2200 in 1994. An integrated conservation effort is urgently required if this species is to be saved from extinction.

The Lesser Florican is an indicator of the health and extent of the grasslands of western India. What makes the Lesser Florican so special is that its requirements coincide with human needs. Its survival calls for a continuation of management practices that have traditionally been associated with *Bheeds*, *Vidis* and *Rakhals*. More important, its survival is dependent on an increase in protected grasslands which will result in an increase in fodder production. Thus the conservation of the Lesser Florican is a reconciliation of human needs and the prevention of extinction.

Management, Planning & Restoration of Grasslands: Action to be taken by the Government

Grasslands managed and protected by Forest Department

- 1) Because fodder harvested from reserved vidis are stored locally but exported during times of scarcity, local people are not benefitted by the fodder produced from reserved vidis.

It is recommended that the villagers around reserved vidis must receive a share of the harvest. This will not only alleviate tensions but will directly give the villagers a stake in the protection of fodder resources in their areas. There must be a greater involvement of people in the production and protection of fodder produced from grasslands. Fodder from reserved vidis must fulfil local needs before the hay can be exported.

- 2) There must be a total ban on the planting of trees in reserved vidis. These areas must be managed purely for the production of grass.

- 3) The present methods of storage and disposal of grass collected from reserved vidis is inadequate and there is a lot of wastage. Moreover, accumulated stockpiles of grass results in local tensions because while people from the surrounding villages are denied both grass cutting rights as well as a share of the harvested fodder, there are often tons of grass rotting in *ganjis*.

It is recommended that:

- i) That the Forest Department be allowed to auction Fodder after one year of storage. Grass stored in ganjis must be consumed before the following monsoon.
- ii) According to existing norms, the revenue department is supposed to first utilise grass stored by the Forest Department, and only if there is no grass available, can it purchase from private contractors. In practice however, grass is often purchased from contractors before Forest Department stockpiles of grass are exhausted. This results storage and disposal problems for the Forest Department. It also results in discouraging proper management of grasslands.

It is recommended that the existing norms are strictly adhered to, that is the Revenue Department must purchase grass from the Forest Department first, and only if there is no fodder available can grass be purchased from other agencies.

- iii) More godowns must be built for storage of harvested grass, as loss from *ganjis* is very high, both due to rotting from exposure to moisture as well as a loss of nutritional value.
- 4) Maldharis settlements are present in most towns. Their requirement for green and dry fodder has created a 'black market' in these resources and illicit harvesting is now a problem in reserved vidis. It is recommended that a provision be made whereby resident maldharis can directly purchase hay from Forest Department grass godowns and *ganjis*.

Non reserved vidis and all other grasslands that are auctioned by the Government for collection of fodder by gram panchayats & co-operatives

It was recognised that the quality of most non-reserved vidis and grasslands that are leased by the forest department to other agencies is very poor. The existing rule of no grazing but harvesting fodder is being ignored, particularly in those cases when the non reserved vidi is leased to Maldhari co-operatives and gram panchayats. Most of the leased grasslands are overgrazed, or produce very little fodder as the management and protection by the lessees is inadequate.

The only way that the Government can significantly increase its production of fodder is to ensure better implementation of the prescribed management practices in non reserved vidis. For instance, in Saurashtra and Kutch there

are 137 reserved vidis covering a total area of 63292.74 hectares and there are 471 non reserved vidis covering an area of 57602.31 hectares. Thus, with protection and the implementation of grassland development programmes it will be possible for Gujarat to at least increase grass production by 30 to 40 %.

It is recommended that:

- 1) Though non reserved vidis are managed by the Forest Department, often the land is still revenue land. Where ever non reserved vidis are not forest lands, they must be brought under the purview of the Indian Forest Act and should be developed as fodder producing grasslands.
- 2) All non reserved vidis larger than 100 hectares in area must be made into reserved vidis, where the management, protection and harvest is by the Forest Department.
- 3) Where this is not possible, it must be ensured that all agencies that have leased non reserved vidis from the Forest Department must strictly adhere to the practice of harvesting fodder from the grasslands, and not free graze on it. This can be effected by having a greater role in the protection of the non reserved vidi by the Forest Department.

Site Specific Recommendations

Action to be taken up by July 1995

Gujarat

1. The proposed Lala Bustard Sanctuary, Nalliya, Abdasa Taluka, Kutch, Gujarat.

The proposed Lala Bustard Sanctuary is the only place in Gujarat where a viable breeding population of the Great Indian Bustard survives. It is also an extremely important area for the Lesser Florican and the Houbara bustard. Other species of wildlife that this area is important for are chinkara, wolf, jackal, fox and possibly the caracal.

Serious efforts must be made by the Gujarat Forest Department to develop this area for the Great Indian Bustard and the Lesser Florican. Currently the proposed sanctuary consists of only a 200 ha plot which is protected from grazing. It is strongly recommended that at least an additional 1000 hectares be added to the sanctuary and protected from livestock grazing. This 1000 hectares can be in the form of a single unit or in 5 separate plots of 200 hectares each.

As these areas are currently used as grazing lands, it is recommended that grazing is prohibited in the proposed sanctuary plots for 4 months i.e. June 15 to October 15, and the local villagers are permitted to graze in the winter and summer.

2. Khageshri is a series of large non reserved vidis adjacent to reserved

vidis in Jam Jodhpur and Kutiyana Talukas in Jamnagar and Junaghad districts of Gujarat. These areas must be declared as reserved vidis which will result in a single protected grassland complex of about 7000 hectares and will be of immense fodder value. As people may be using these areas, it is recommended that the Forest Department protects these areas but permits locals to harvest at least part of the fodder. This will result in a reduction of tensions.

3. Tatagolla and Kharonda are plantation areas near Dohad in Panchmahal district of Gujarat. This area should be developed as fodder producing grasslands. The Forest Department can initially protect this area, and permit surrounding villages to harvest the grass.
4. The Bhal region, Bhavnagar district, Gujarat, was a very important grassland area in the past. However, *Prosopis juliflora* has spread and choked most of the grassland areas. The grasslands of the Bhal were an important grazing and fodder resource as well as excellent habitat for the blackbuck, wolf and the Lesser Florican.

It is recommended that one or more areas, on the lines of Velavadar National Park be developed in the Bhal. This can be achieved by eradicating patches of *Prosopis juliflora*. The minimum size of areas to be eradicated should be 300 to 500 hectares. In the first year, forest area along with wasteland in Savainagar, Madhia, Rajgadh and Mewasa village area should be taken up for this development.

Madhya Pradesh

1. Dhar district is particularly important for grasslands and the Lesser Florican. At least 300 hectares of land should be acquired around Dhulat, Piparni and Karnawat villages in the Sardarpore Sanctuary and developed as grasslands. These grasslands can be protected by the Forest Department and the fodder can be harvested and utilised by the villagers.
2. Additional areas must be acquired adjacent to the Panpura grassland and restored and managed as grasslands.
3. The Sailana Kharmor Sanctuary is rapidly being degraded. At least 100 hectares of land must be acquired by the Forest Department if this very important grassland is to be saved.
4. Adjacent to Suntodh village near Mandsaur is a grassland that belongs to the Madhya Pradesh Forest Department. This grassland is annually auctioned, but the quality of protection by the village is very poor. More effective protection needs to be given to this grassland by the Forest Department, but the people may be permitted to harvest and utilise the grass.